

FIG. 1 is a schematic diagram of a fiber-optic probe assembly 200. The assembly includes a fiber mount block 431, a collection micro-optics assembly 436, a collection fiber bundle assembly 450, an excitation fiber bundle assembly 420, and a source module 423. The probe is used to measure a sample 112 through a capillary 140. The diagram shows the optical paths for both collection and excitation light.

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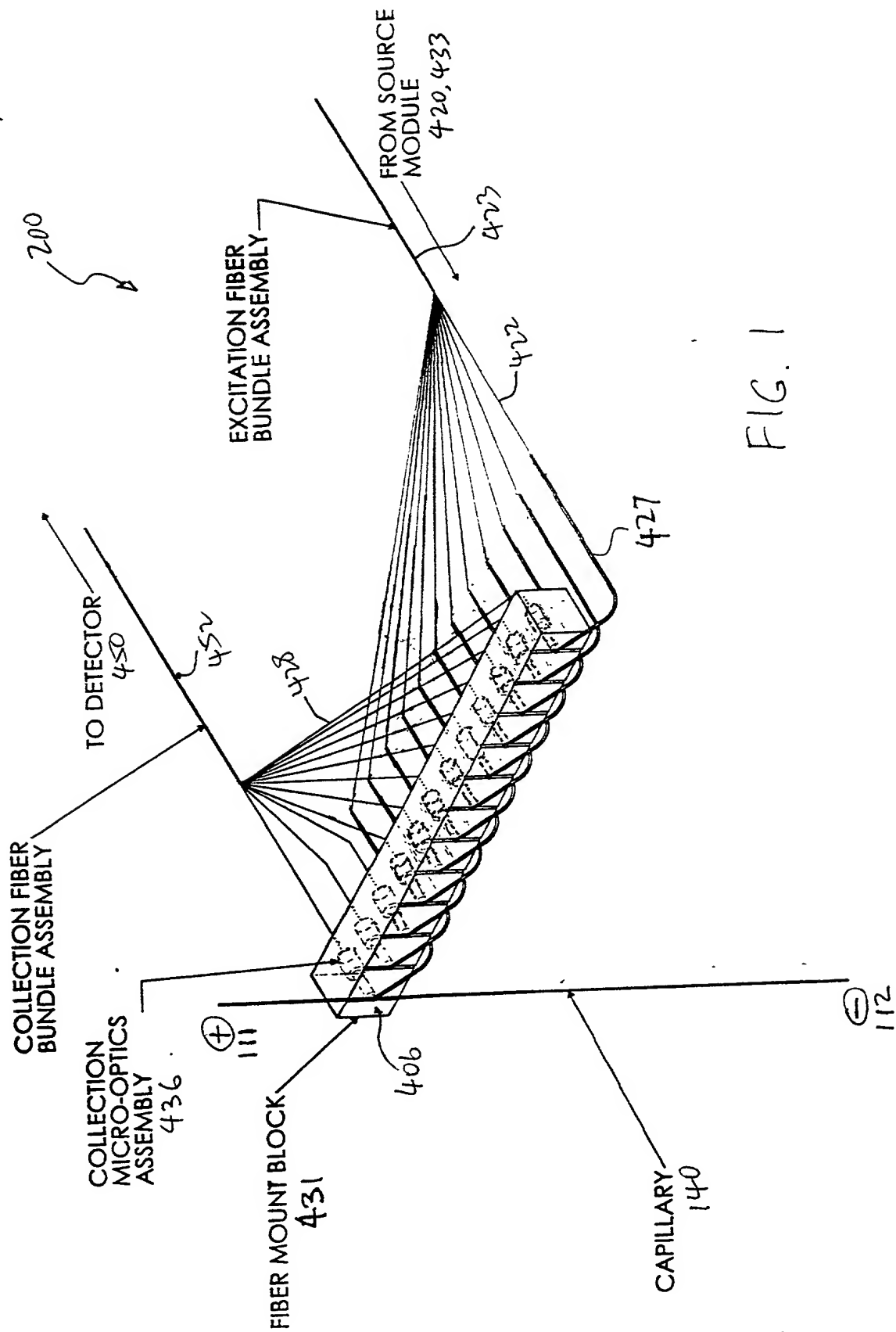
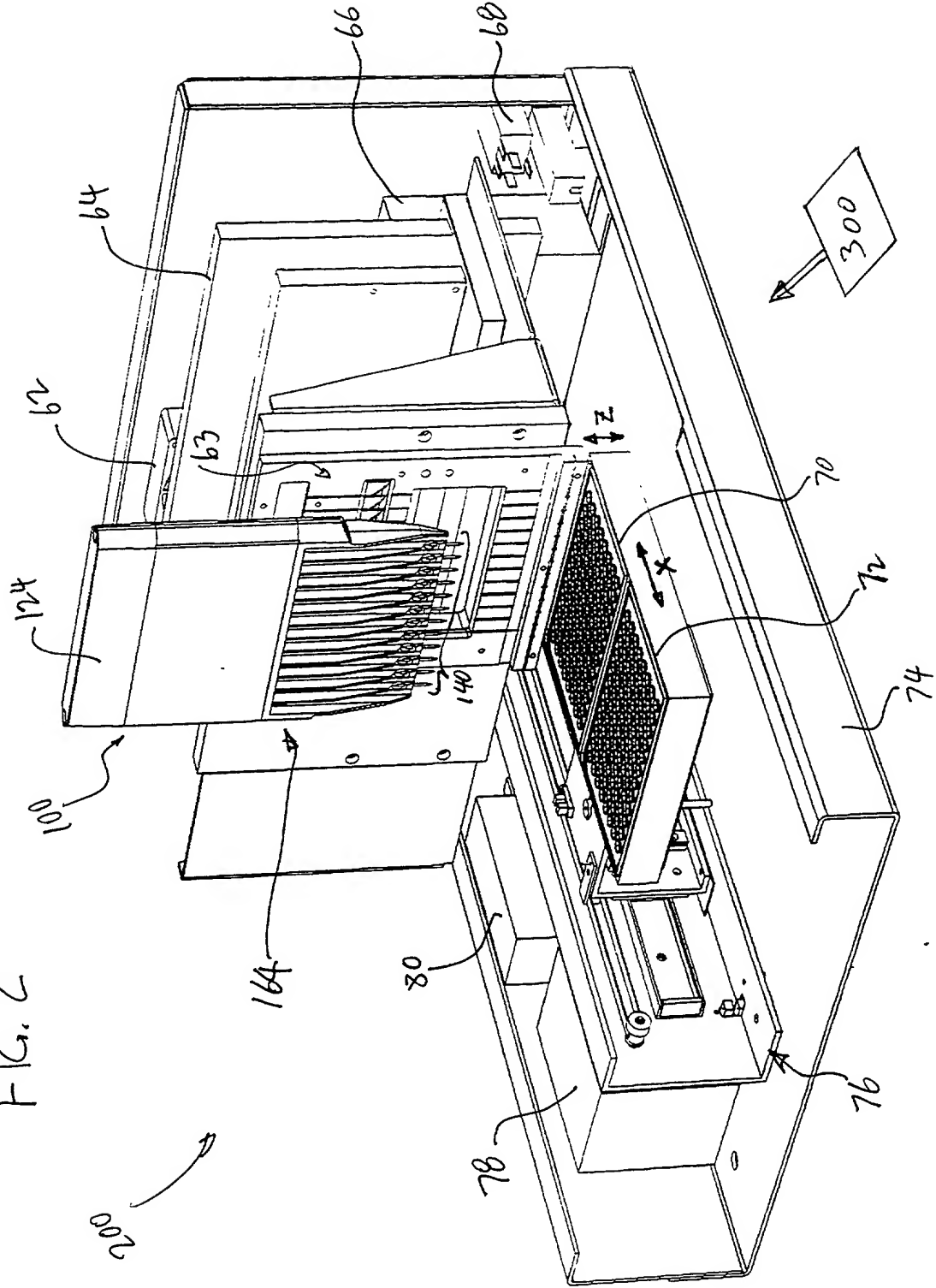


FIG. 1

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FIG. 2



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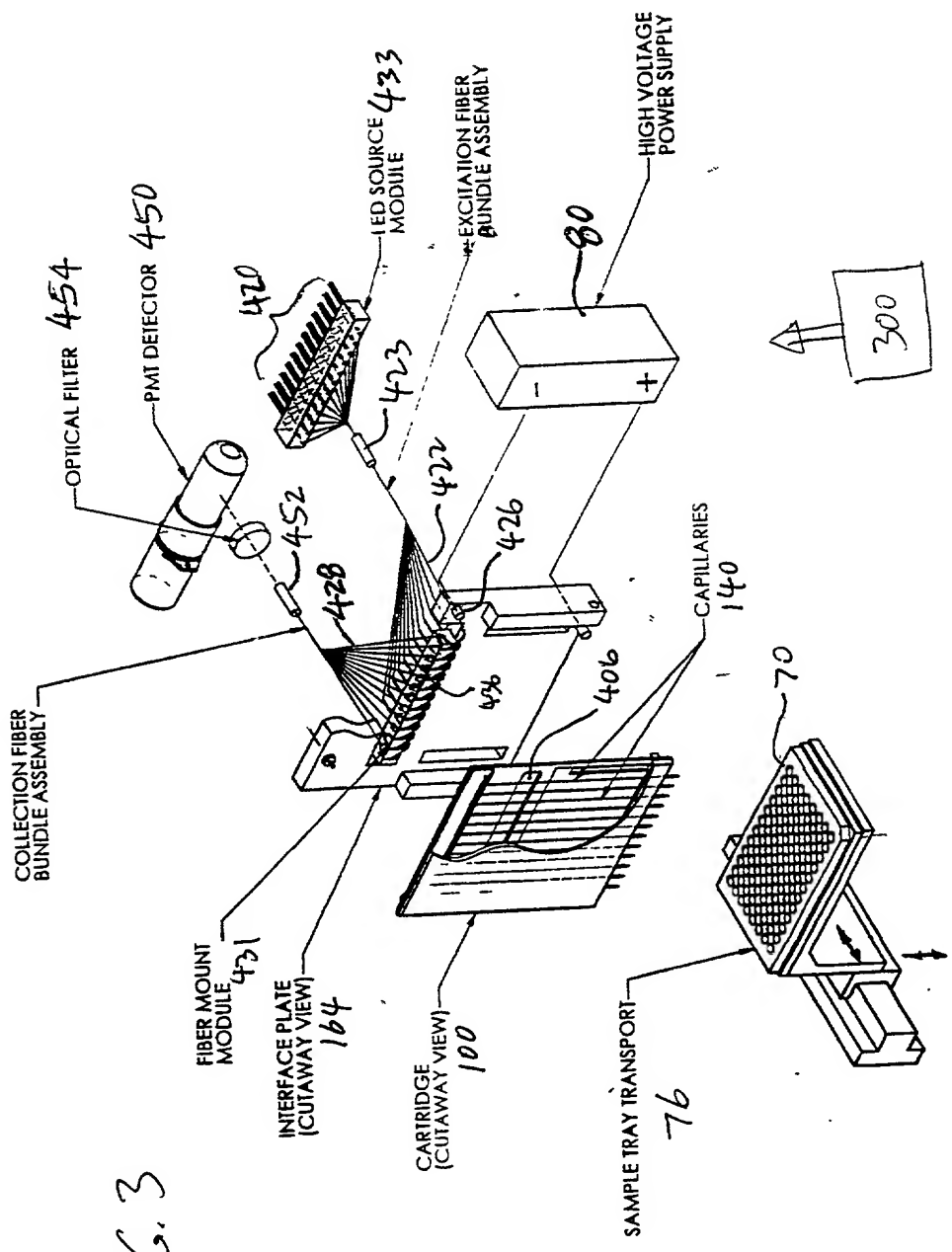
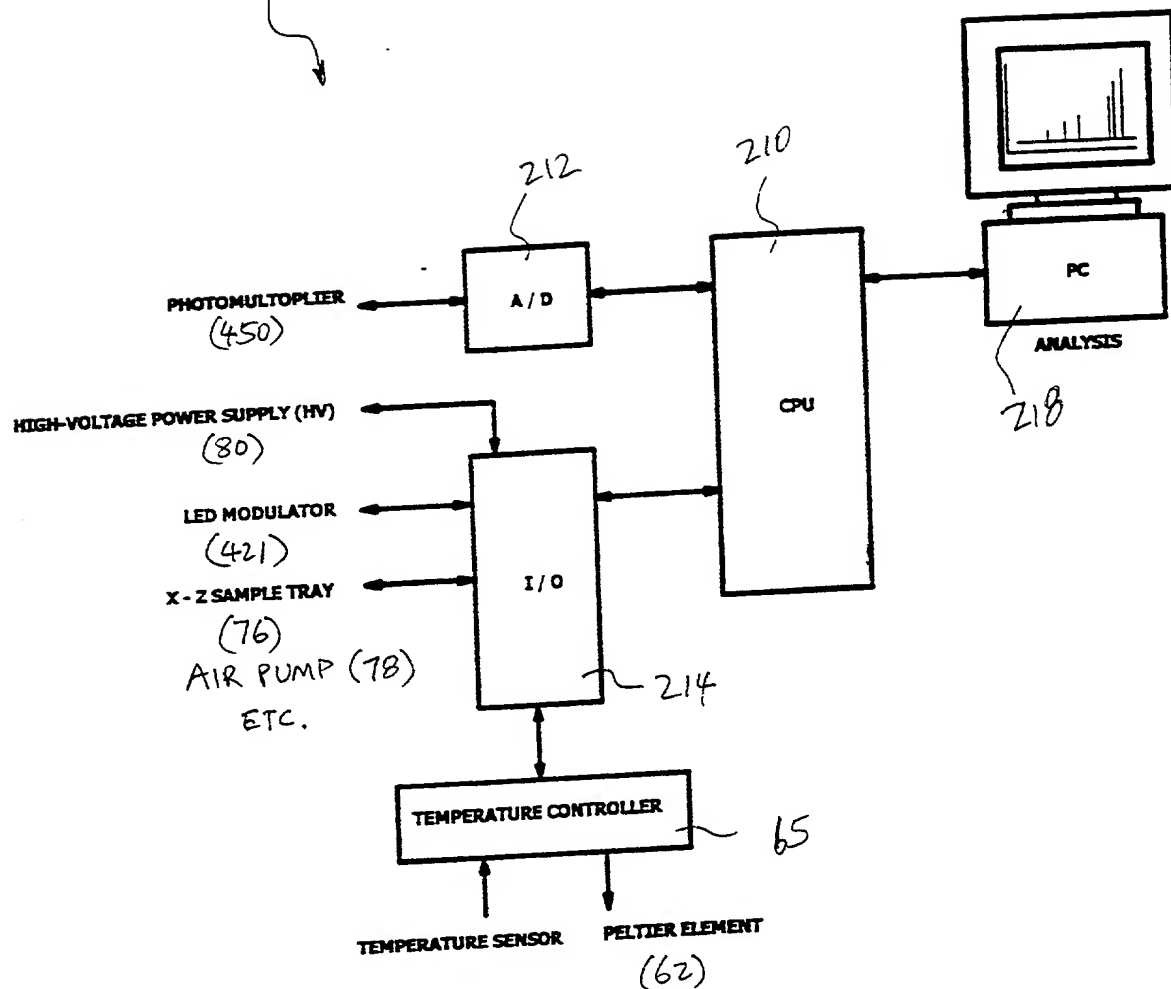


FIG. 3

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300



CONTROL SYSTEM DIAGRAM

FIG. 4

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Duty Cycle =  $1/12 = 8.3\%$

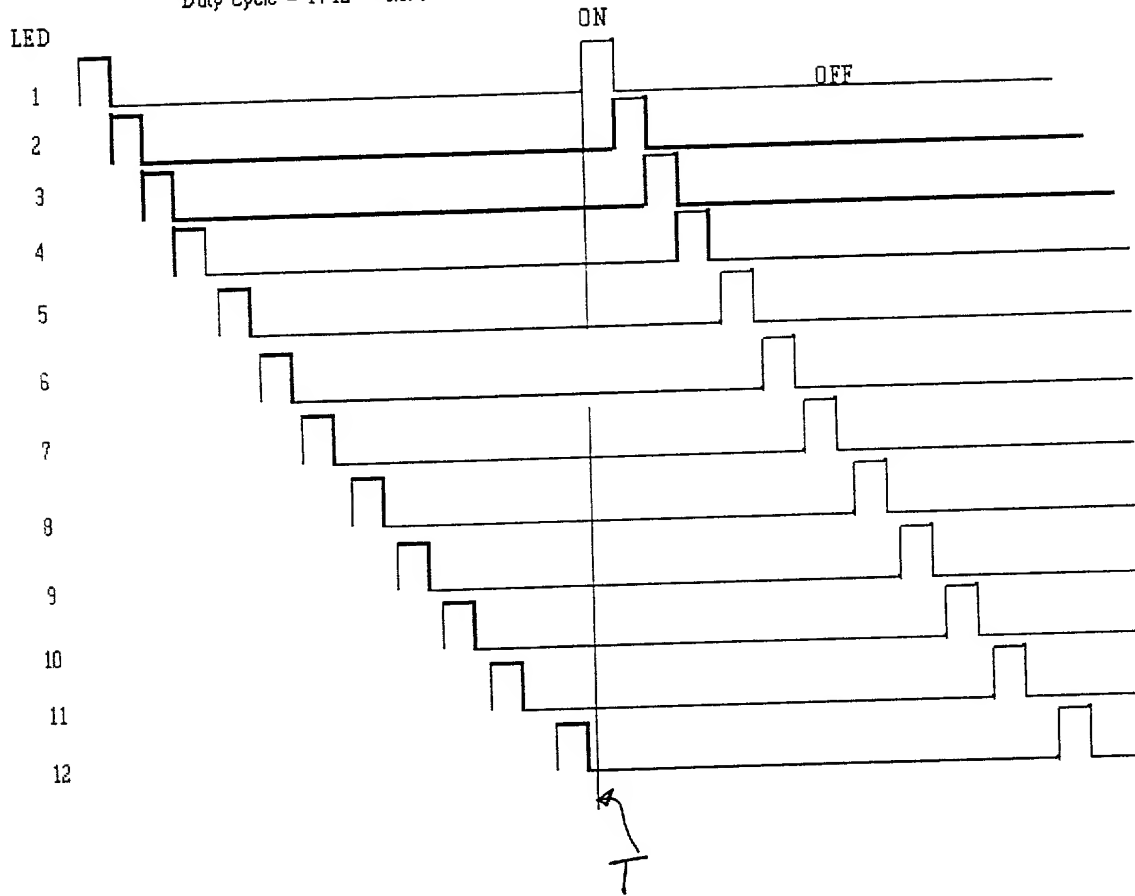


FIG. 5